

APPROVED	O.G. FIG.	
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Applicant(s): Takuya Tamatani et al.

ANTIBODIES SPECIFIC FOR A CELL SURFACE MOLECULE
MEDIATING CELL ADHESION AND SIGNAL TRANSMISSION,
CELLS SECRETING SUCH ANTIBODIES, AND METHODS OF
MAKING AND USING SUCH ANTIBODIES

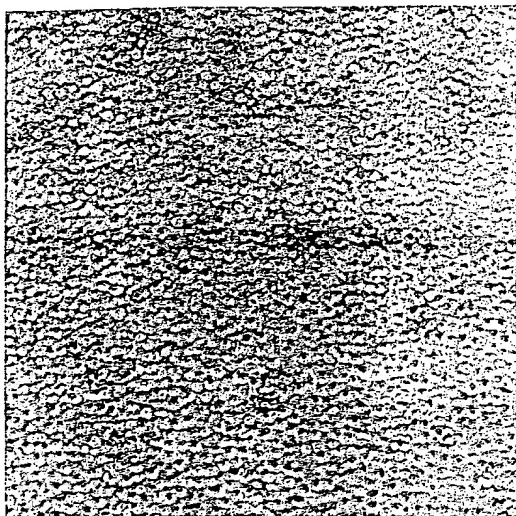


FIG. 1A

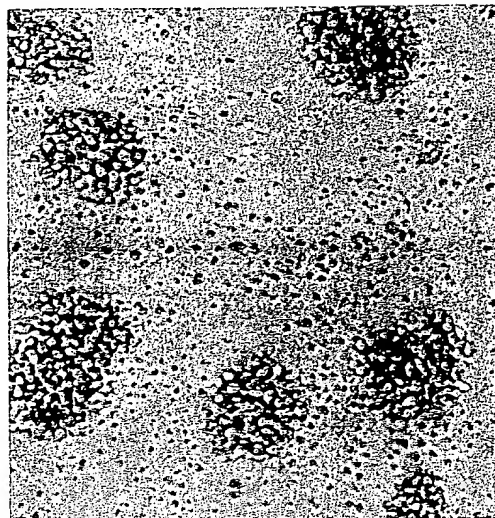


FIG. 1B

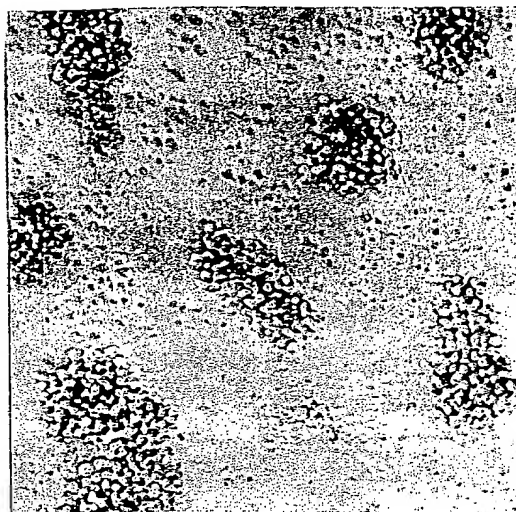


FIG. 1C

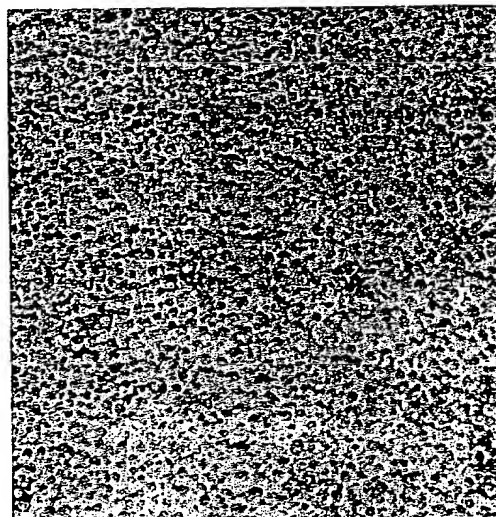
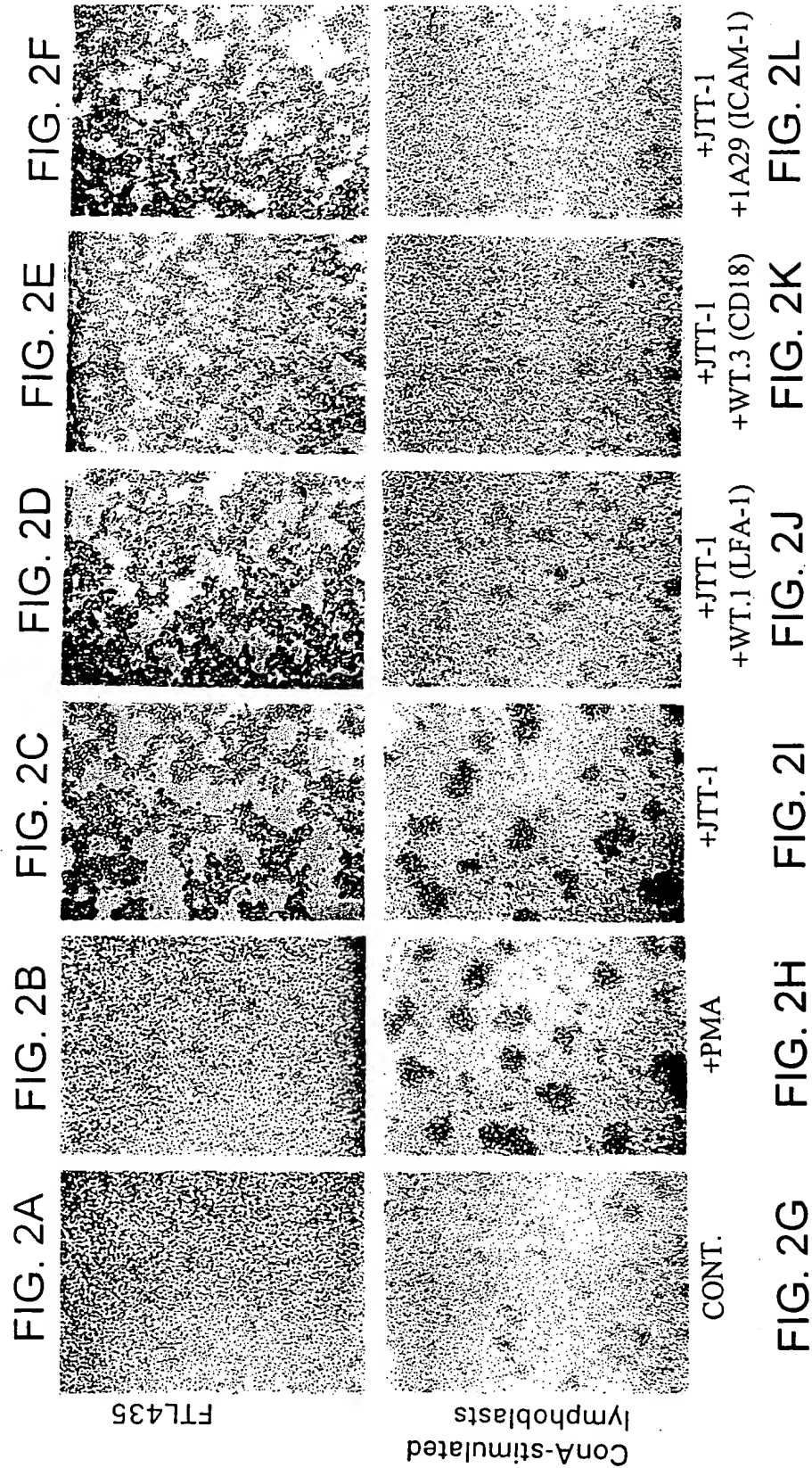


FIG. 1D



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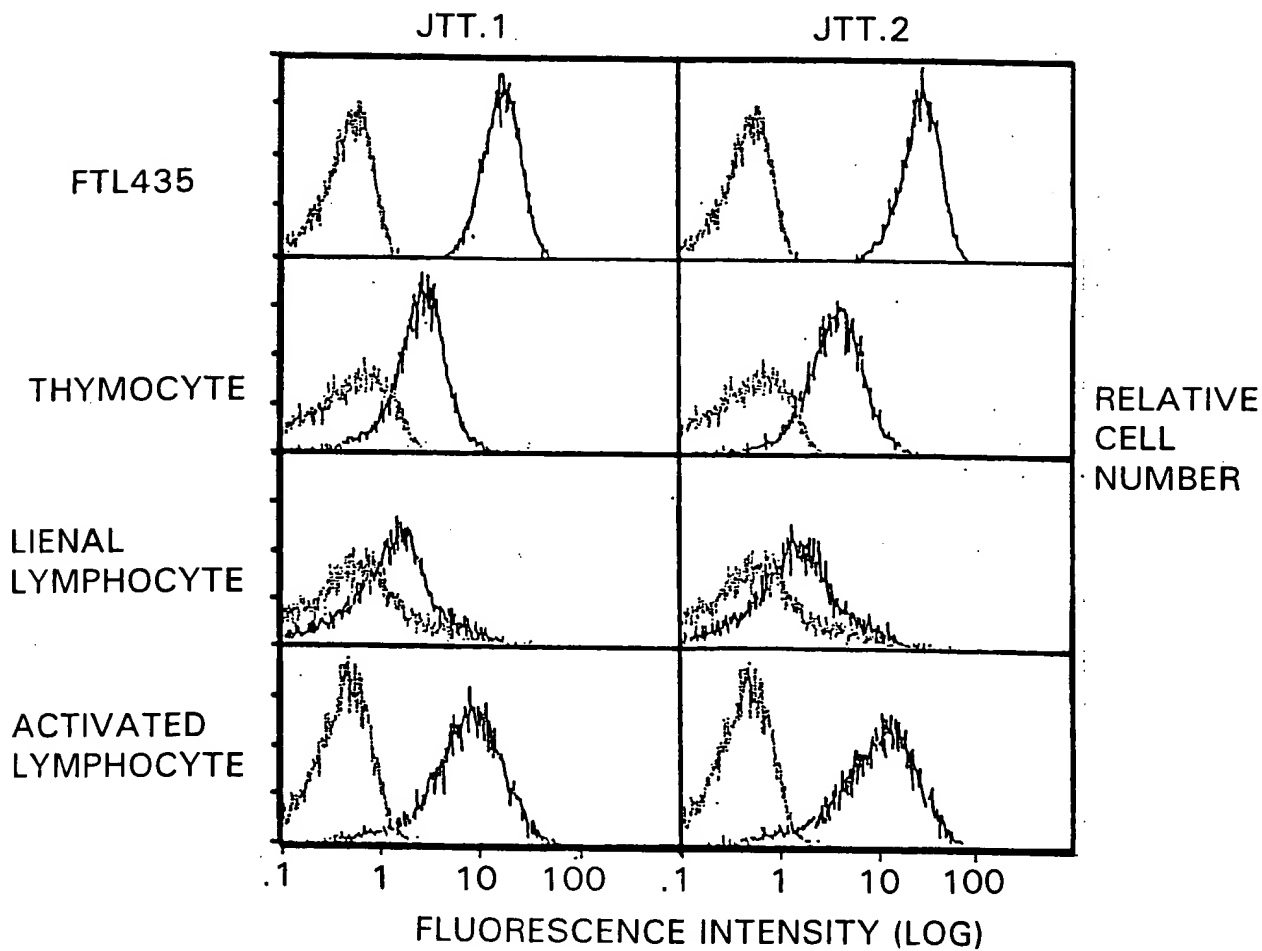
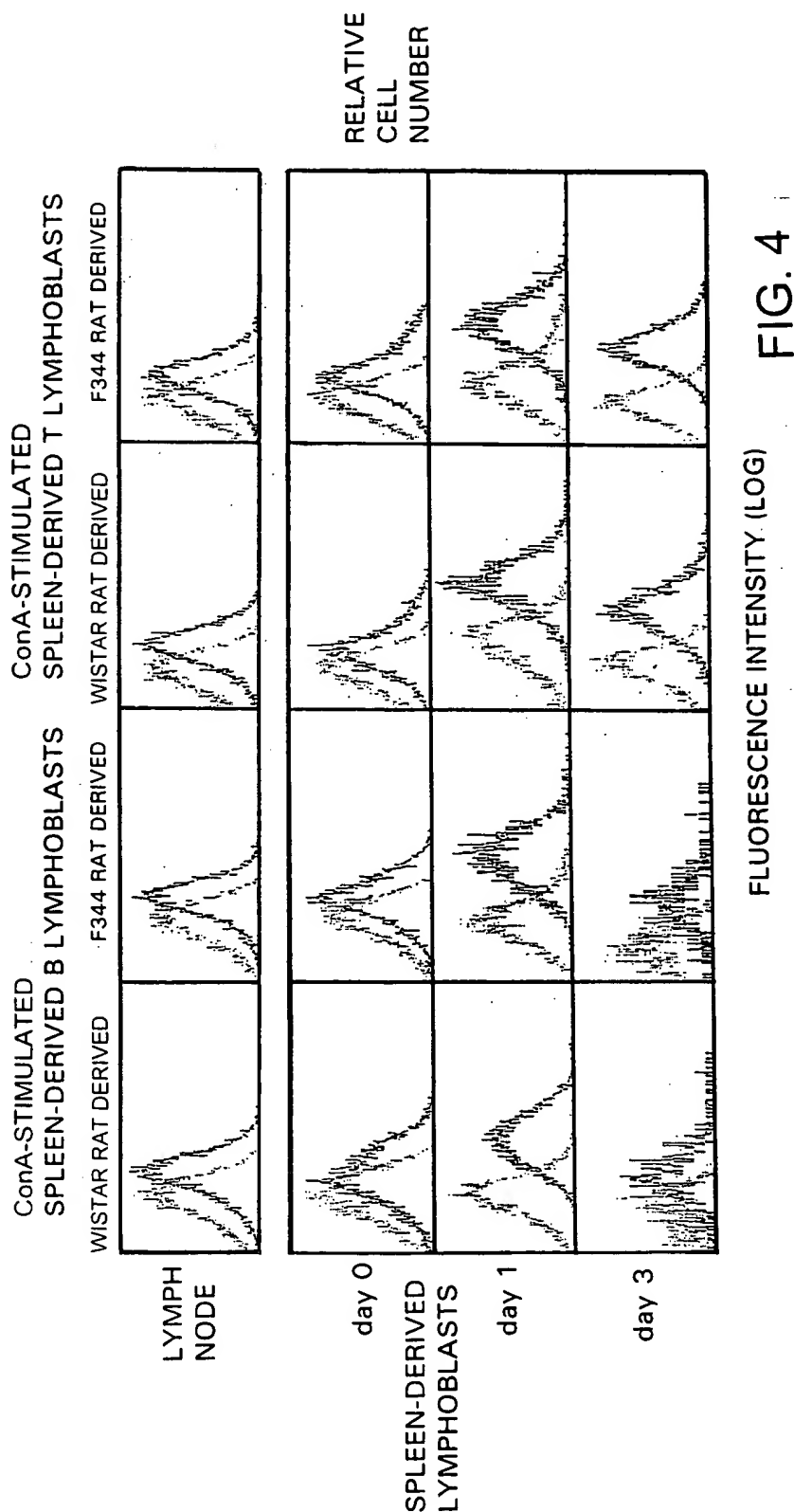


FIG. 3

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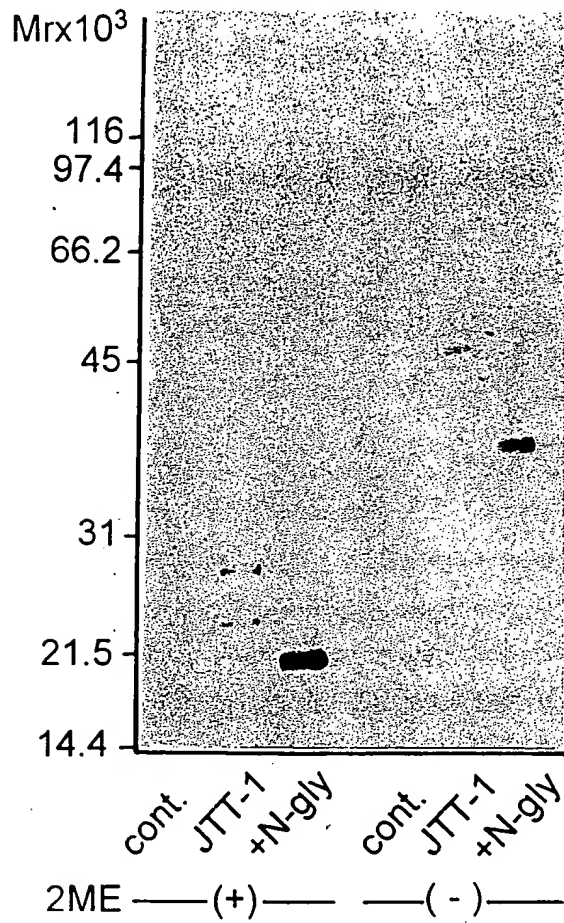


FIG. 5

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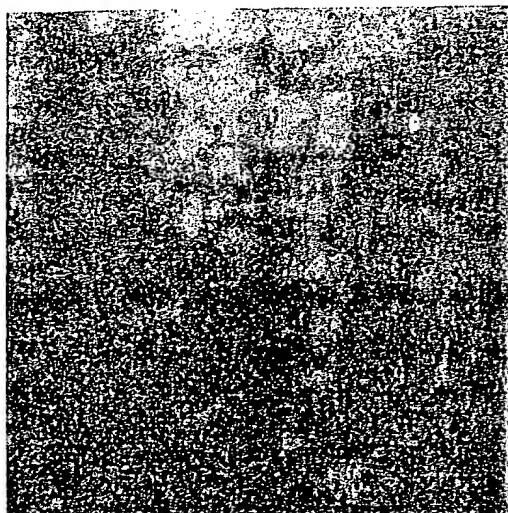


FIG. 6A

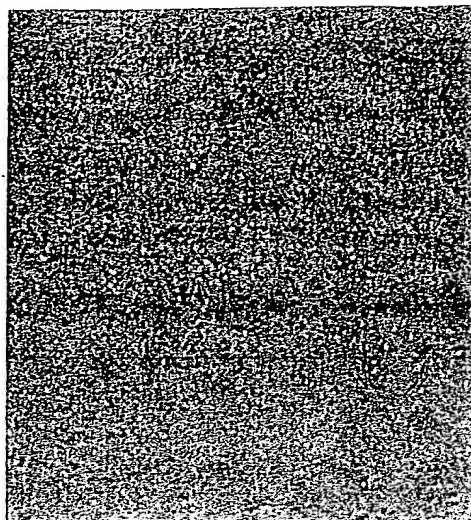


FIG. 6B

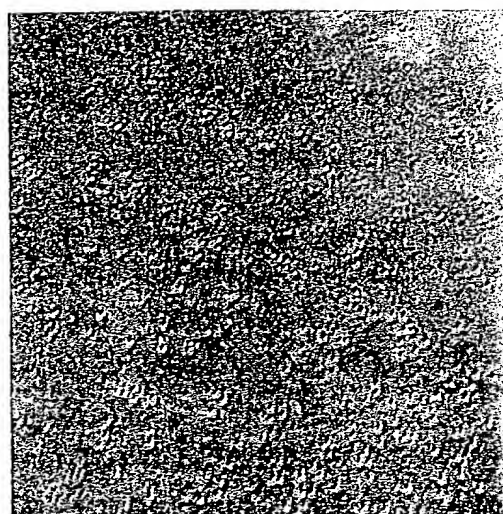


FIG. 6C

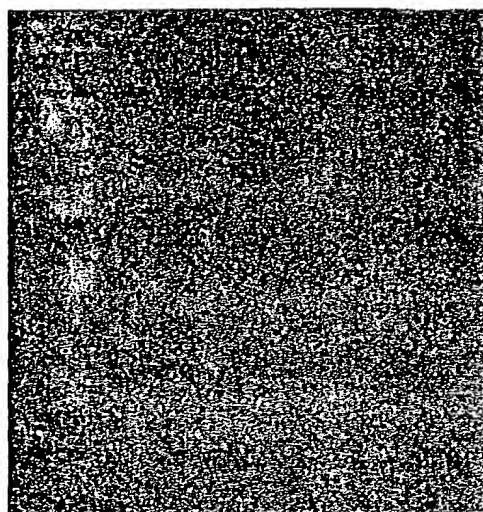


FIG. 6D

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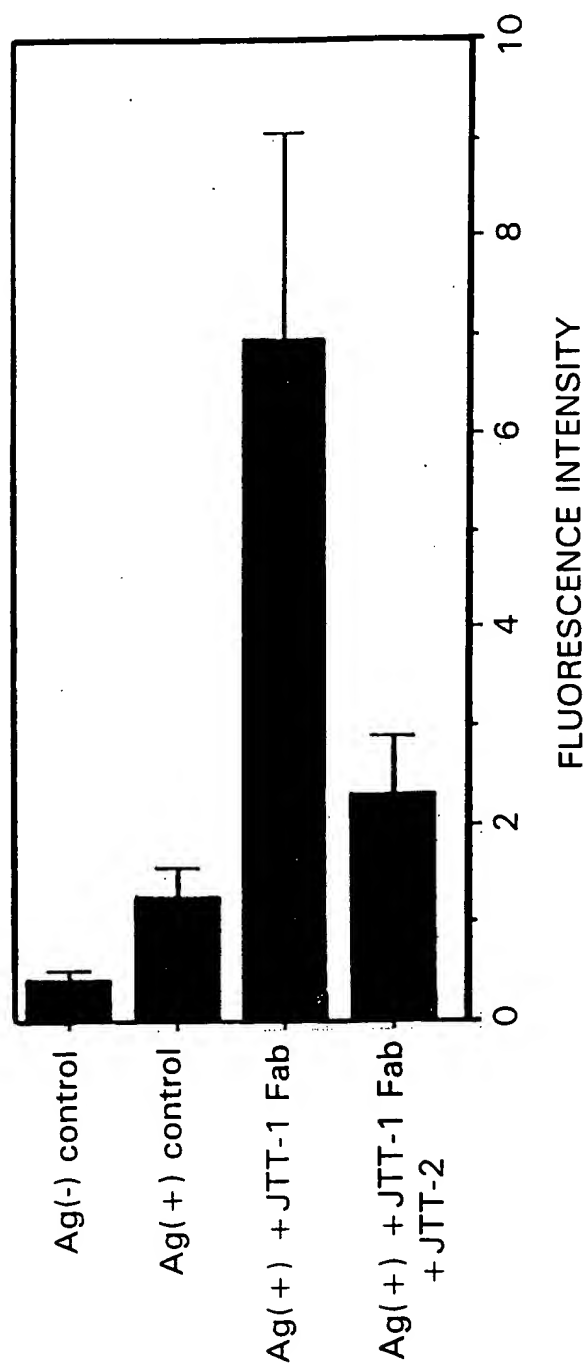


FIG. 7

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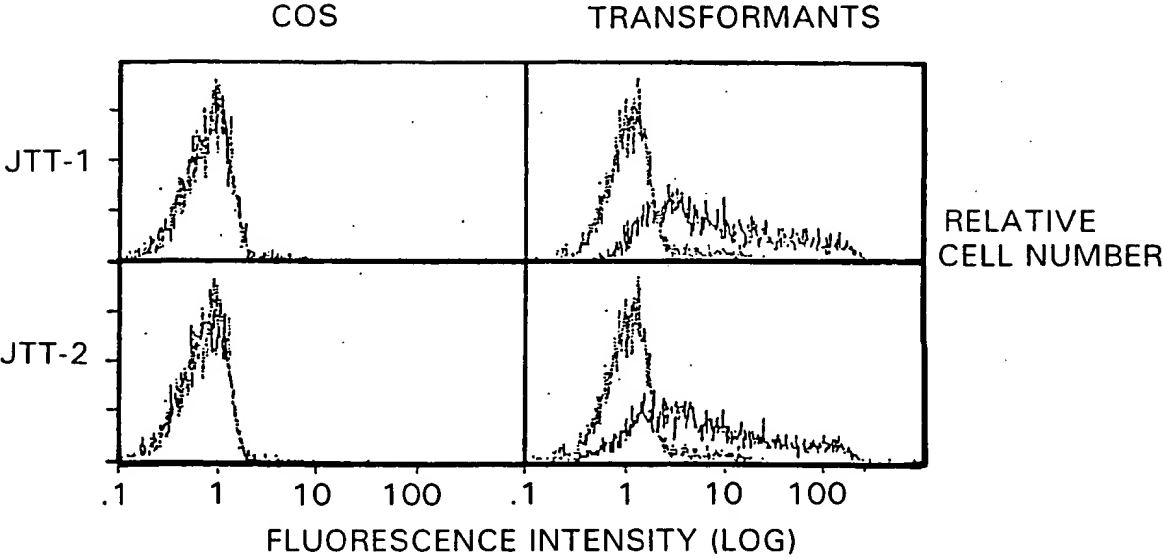


FIG. 8

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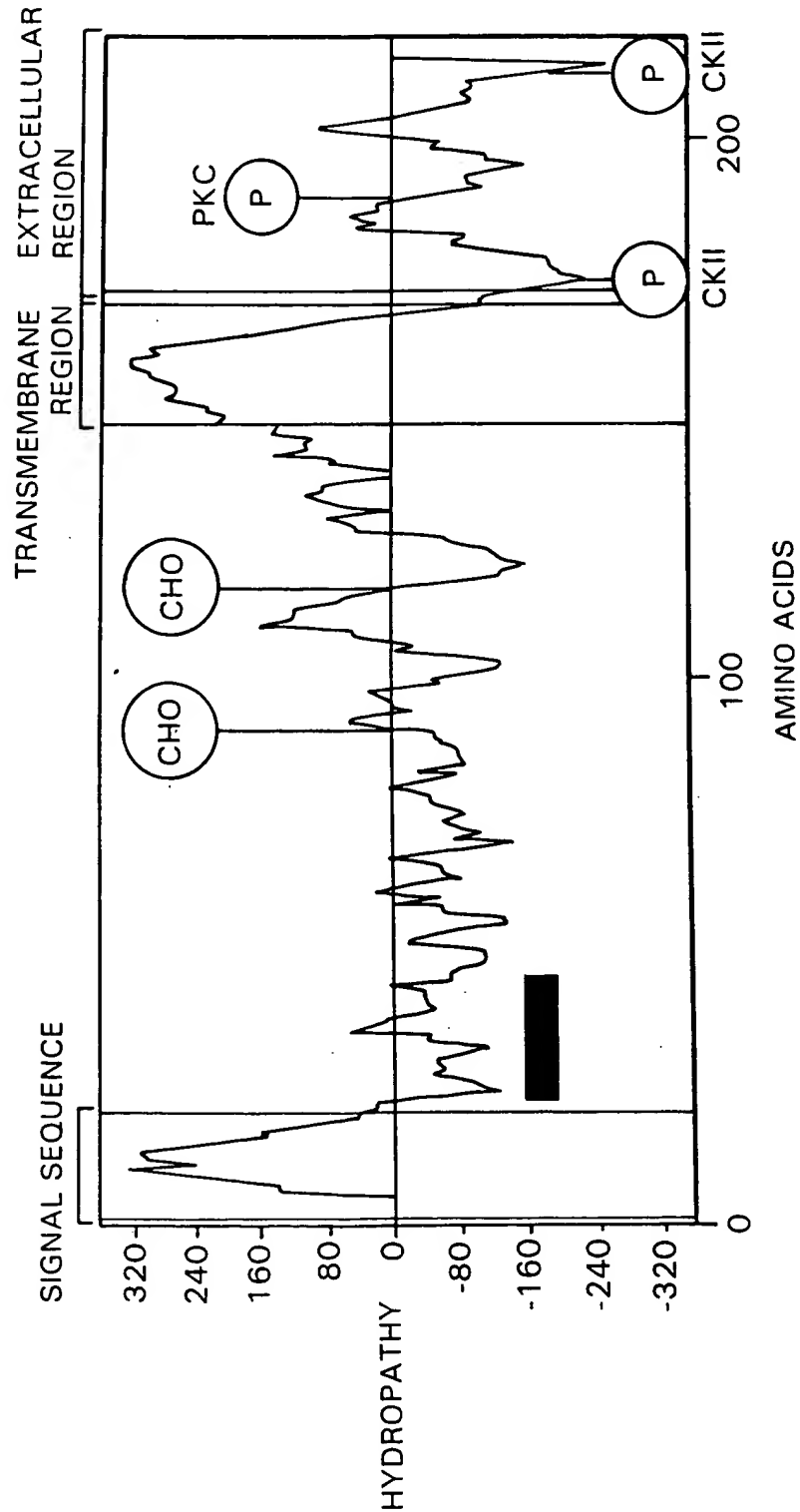


FIG. 9

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human	M K S G L W Y F F L	F C L R I K V L T G E I N G S A N Y E M F I F H N G G V Q I I	L C C N K Y P P D I V Q Q	50
rat	M K P Y F S C V F V	F C F L I K L L T G E E L N D L A N H R M F S F H D D G G V Q I I	L S C N Y P P E T V Q Q	50
mouse	M K P Y F S C V F V	F C F L I K L L T G E E L N D L A N H R M F S F H D D G G V Q I I	L S C N Y P P E T V Q Q	50
consensus	M K P Y F . . V F	F C F L I K L L T G E . . A N H R M F S F H . G G V Q I I	L S C . Y P P E T V Q Q	50
human	F K M Q L L K G G Q	I L C D D L T K T K G S G N T V S I K S L K F C H S Q L S N N S V S F F L Y N D	D D D D D D D D D D	100
rat	L K M Q L L F K D R E	V L C C D D L T K T K G S G N T V S I K N P M S C P Y Q L S N N S V S F F L Y N A D	N A D D D D D D D D	100
mouse	L K M R L L F R E R E	V L C C E L T K T K G S G N A V S I K N P M L C L Y H L S N N S V S F F L Y N A D	N P D D D D D D D D	100
consensus	L K M Q L L F K . R E	V L C D D L T K T K G S G N T V S I K N P M . C . Y Q L S N N S V S F F L Y N . D	N . D . D . D . D . D .	100
human	H S H A N Y Y F C N	L S I F D P P P P F F Q - V T L T G G Y L H I Y E S Q L C C Q L K P W L P I G C A A	C A A A A A A A A A	149
rat	S S Q G S Y F L C S	L S I F D P P P P P F F Q E K N L S G G Y L L I Y E S Q L C C Q L K L W L P V G C A A	C A A A A A A A A A	150
mouse	S S Q G S Y F L C S	L S I F D P P P P P F F Q E K N L S G G Y L L I Y E S Q L C C Q L K L W L P V G C A A	C A A A A A A A A A	150
consensus	S S Q G S Y . . C S	L S I F D P P P P P F F Q E . N L S G G Y L . I Y E S Q L C C Q L K L W L P V G C A A	C A A A A A A A A A	150
human	F V V V C I L G C I	L I C W L T K K K K Y S S S V H D D P N S E E Y M F M A A V N T A K K S R L L A G T S	L T K K K K Y S S S V H D D P N S E E Y M F M A A V N T A K K S R L L A G T S	199
rat	F V A A L L F G C I	F I V W F A K K K K Y R S S V H D D P N S E E Y M F M A A V N T A K K S R L L A G T S	F I V W F A K K K K Y R S S V H D D P N S E E Y M F M A A V N T A K K S R L L A G T S	200
mouse	F V V L L F G C I	L I I W F S K K K K Y G S S V H D D P N S E E Y M F M A A V N T A K K S R L L A G T S	L I I W F S K K K K Y G S S V H D D P N S E E Y M F M A A V N T A K K S R L L A G T S	200
consensus	F V . . L L F G C I	L I . W F . K K K K Y . S S V H D D P N S E E Y M F M A A V N T A K K S R L L A G . T .	L I . W F . K K K K Y . S S V H D D P N S E E Y M F M A A V N T A K K S R L L A G . T .	200
human	- - - - -	- - - - -	- - - - -	199
rat	- - - - -	- - - - -	- - - - -	200
mouse	L R A L G R G E H S	S C Q D R N	- - - - -	216
consensus	- - - - -	- - - - -	- - - - -	216

FIG. 10

Applicant(s): Takuya Tamatani et al.

ANTIBODIES SPECIFIC FOR A CELL SURFACE MOLECULE
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JTTT1	M	- - - - -	K S G L	- - - W	- Y F F L	F C L R	I K V	L T G E I N G	S A N Y E M F I F H
CD28	M	- - - - -	R L L L A	- - - - -	- L N L P F	P S	I Q V	T G N K I L V	K Q S P M L V A Y D
CTLA4	M	A C L G F Q R H K	A Q L N L A	A A R T W	P C T L L F F L L F		I P V	F C K A M H V	A Q P A V V L A S S
sensusus	M	- - - - -	. L . L	- - - W	- - - L . L F	.	I . V	. . . . I . V	. . . . A . .
JTTT1	N	G G V Q I L	C K Y	- - P D I V Q Q F K	M Q L L K G G Q I L		- - - C	D L T K T	K G S G N T V S I K
CD28	N	A V - N L S	C K Y	S Y N L F S R E F R	A S L H K G L D S A	V E V	- C V V Y G N	Y S Q Q L Q V Y S K	
CTLA4	R	G I A S F V C	E Y	A S P G K A T E V R	V T V L R Q A D S Q	V T E V	C A A - - T	Y M T G N E L T F L	
sensusus	N	G	C K Y	. . P . . . E F R	. . L L K G . D S .	V . . - C	. . . . T	Y . . G N . V . . K	
JTTT1	S	L K F C	H S Q L S	N N S V	S F F L Y N	L D H S H A N Y	Y F F	C N L S I F D D	P P P P
CD28	T	G F N C	D G K L G	N E S V	T F Y L Q N	L Y V N Q T D I	Y F F	C K I E V M Y P P P	F - - K V T L T G G
CTLA4	D	S I C	T G T S S	G N Q V	N L T I Q G	L R A M D T G L	Y I	C K V E L M Y P P P	Y L D N E K S N G T
sensusus	. . . .	C . G . L S	N N S V	. F . L Q N	L T . .	Y F	C K . E . M Y P P P	Y N G T	
JTTT1	Y	L H I Y E S Q L	C	C Q L K F	- - - - -	- W - L	P I G C A	A F V V V C I	L G C -
CD28	I	H V K G K H L C	C	P S P L F	P G P S K	P F W V L V V V G G	V L A C Y S L L	L V T V	A F I I F W V R S
CTLA4	Q	I Y V I D P E P C	C	P D S D F	- - - - -	L L W I L A A V S S	G L F F Y S F L	L L T -	- A V S L S K M L K
sensusus	. I H V	L C	C	P F	- - - - -	. . . . V	L Y S .	L T -	A . I X
JTTT1	K	Y S	S S V H D P N	G E Y M F M	M R A V N	T A K K S R	- - - - -	L T D V T L	- - - - -
CD28	K	R S	- - - R L L H	S D Y M N M	T P R R	P G P T R K H Y Q P	Y A P P R D F A A Y	R S	
CTLA4	K	R S	- - - P L T T	G V Y V K M	P P T E	P E - C E K Q F Q P Y	- - - - - F I P I	N -	
sensusus	K	R S	- - - . L . .	G . Y M . M	. P K . .	Q P D F	- - - - -	-	

FIG. 11

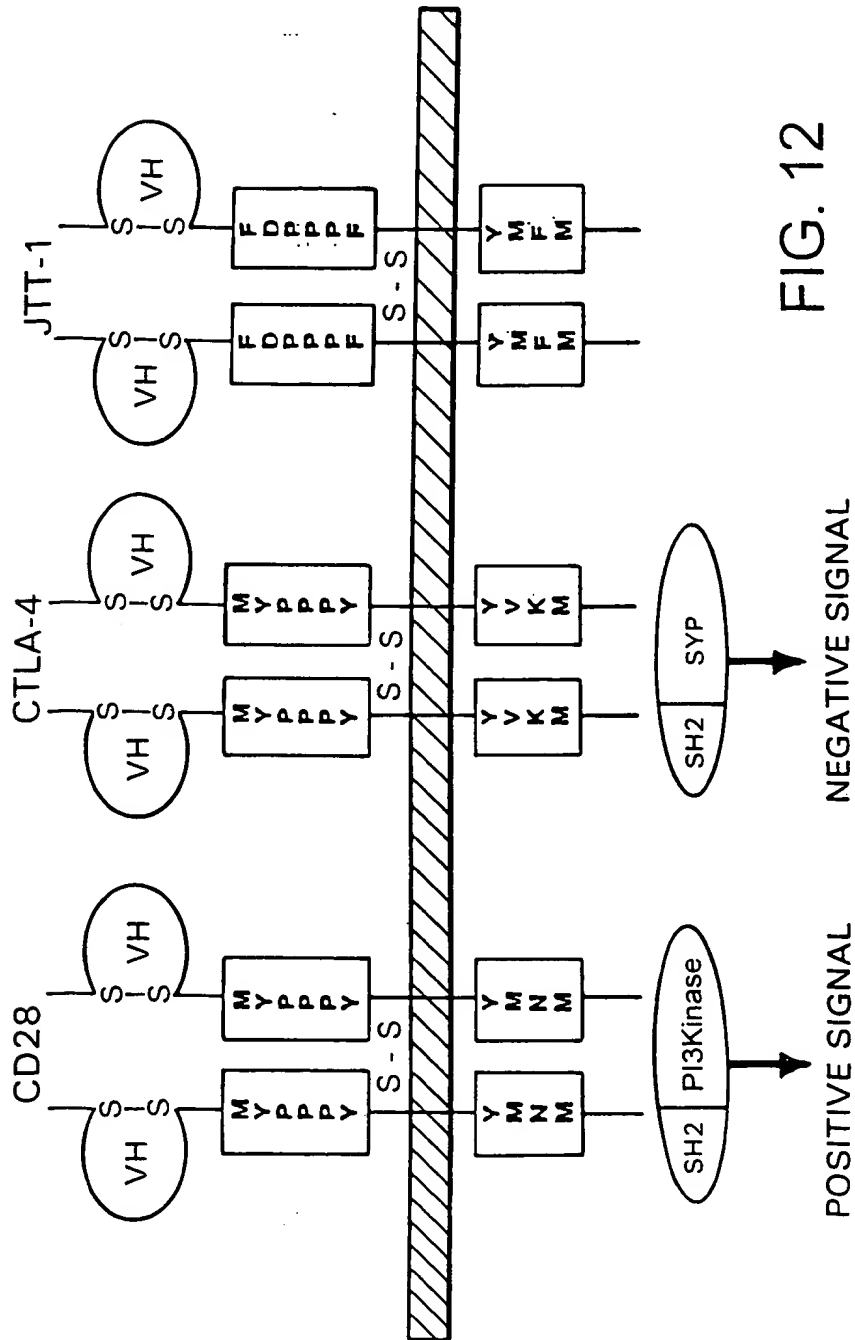
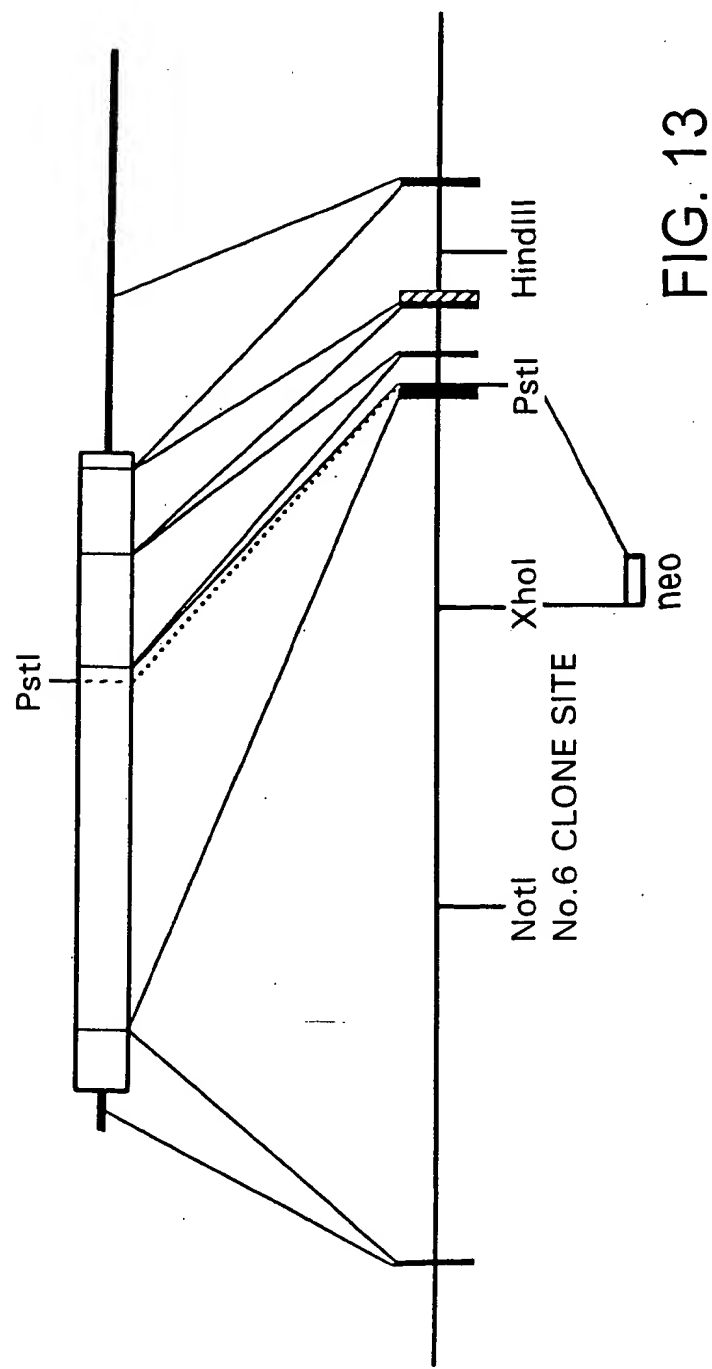


FIG. 12

APPROVED	O.G. FIG.	
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APPROVED	O.G. FIG.	
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ANTIBODY SPECIFIC FOR A CELL SURFACE MOLECULE
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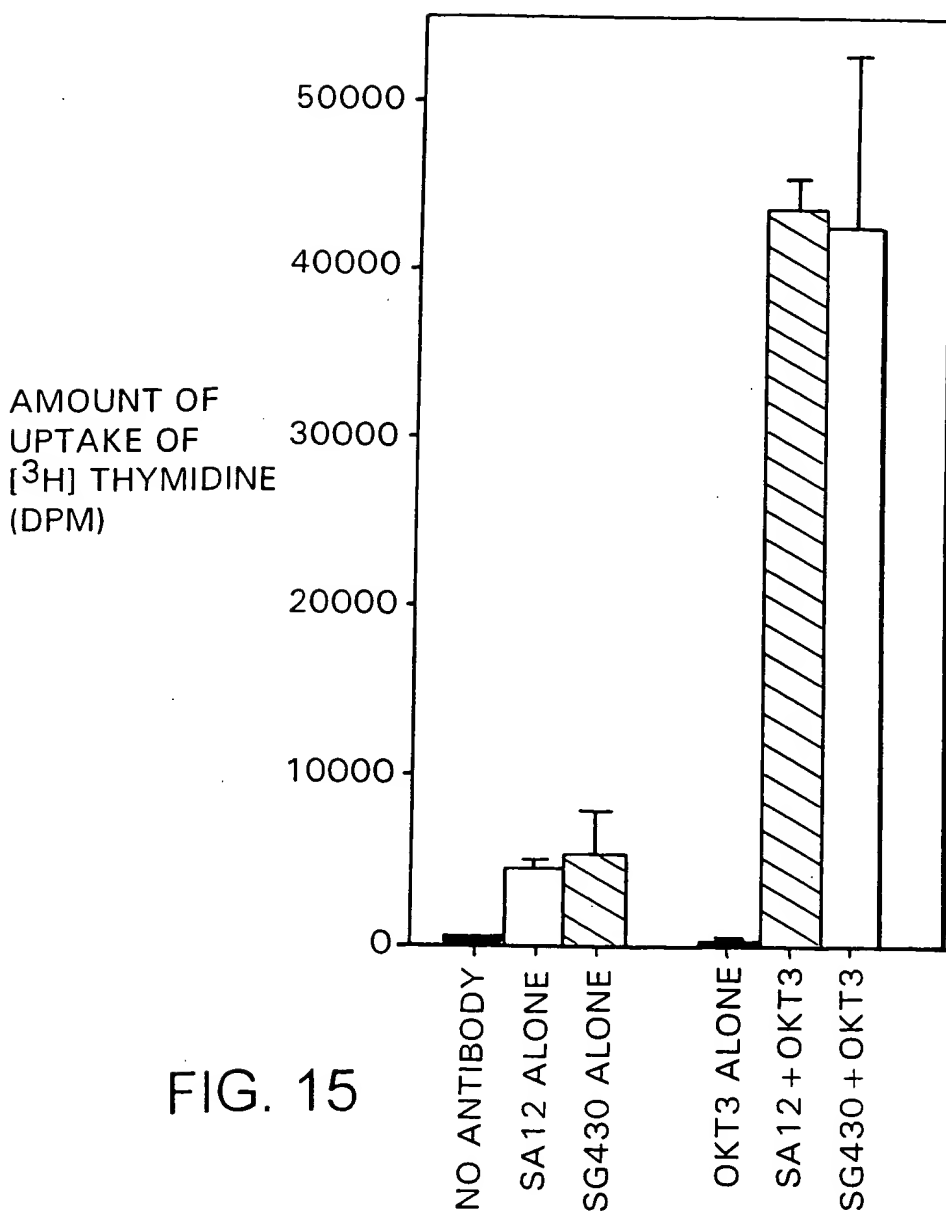
rat	50	
rat mutant	50	
consensus	50	
rat	100	
rat mutant	100	
consensus	100	
rat	150	
rat mutant	150	
consensus	150	
rat	200	
rat mutant	200	
consensus	200	
rat	200	
rat mutant	216	
consensus	216	

FIG. 14

APPROVED	O.G. FIG.	
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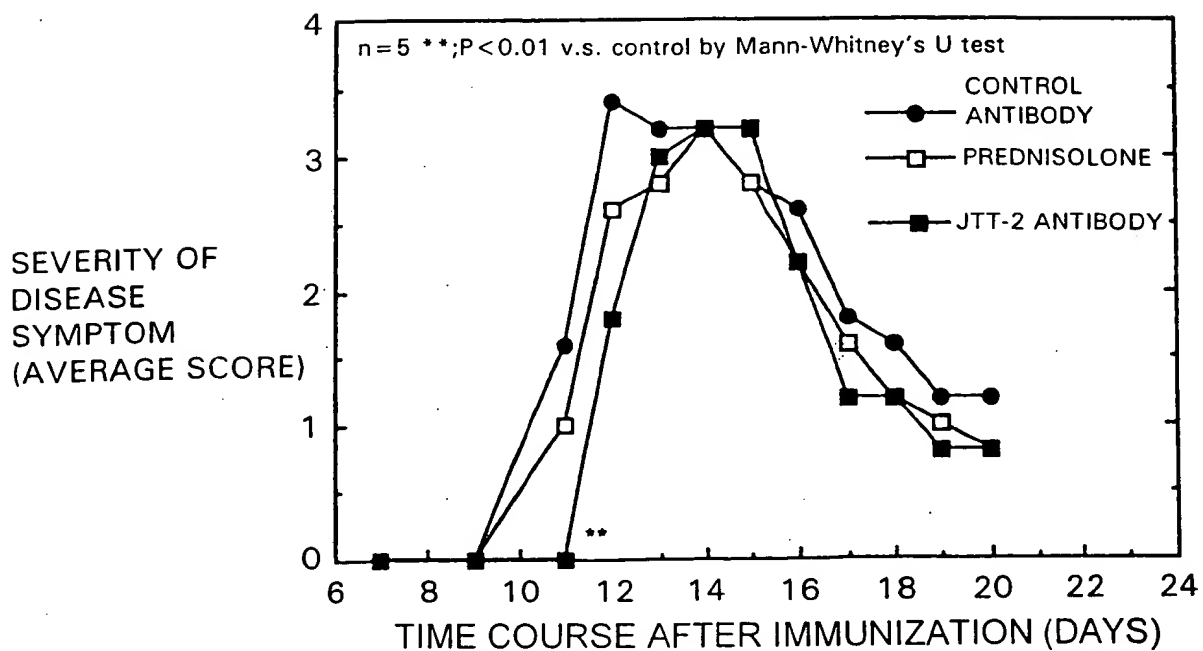


FIG. 16

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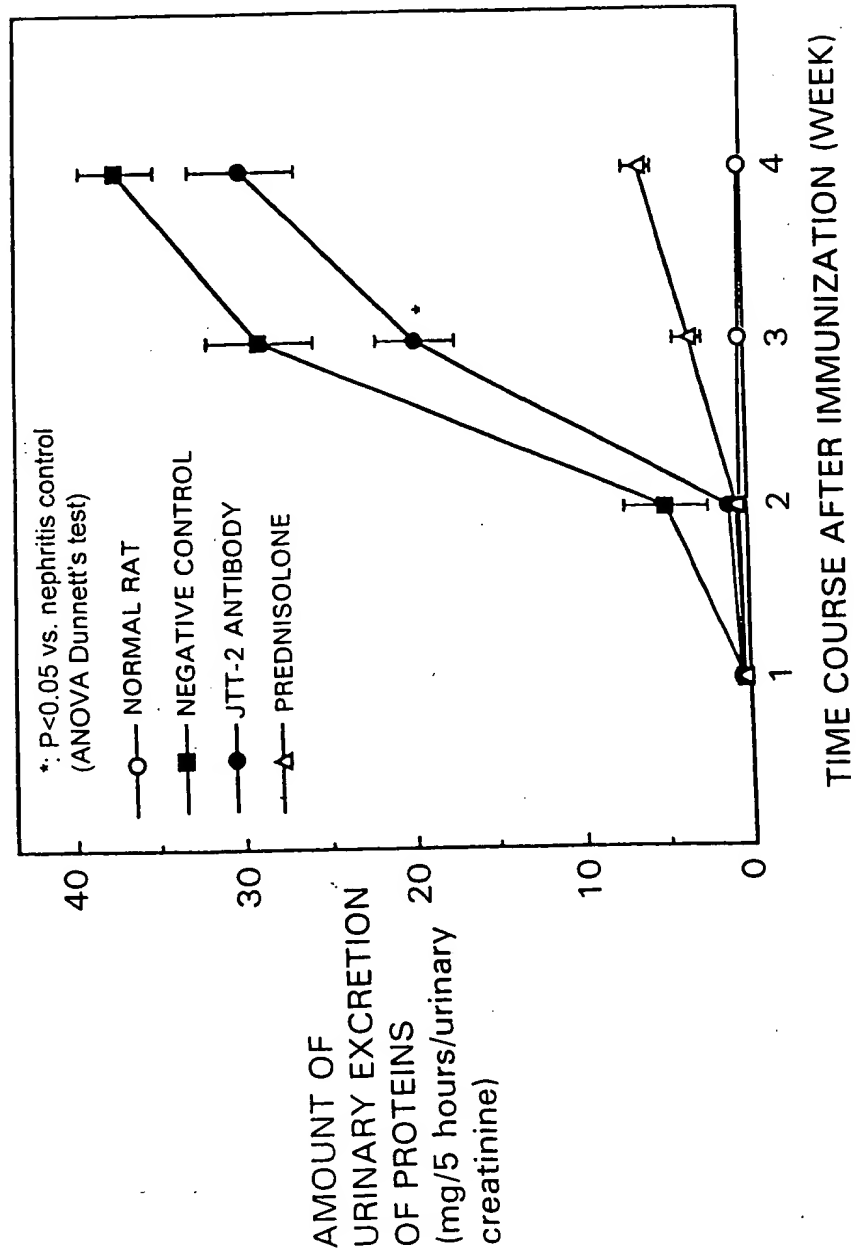


FIG. 17

APPROVED	D.G. FIG.	
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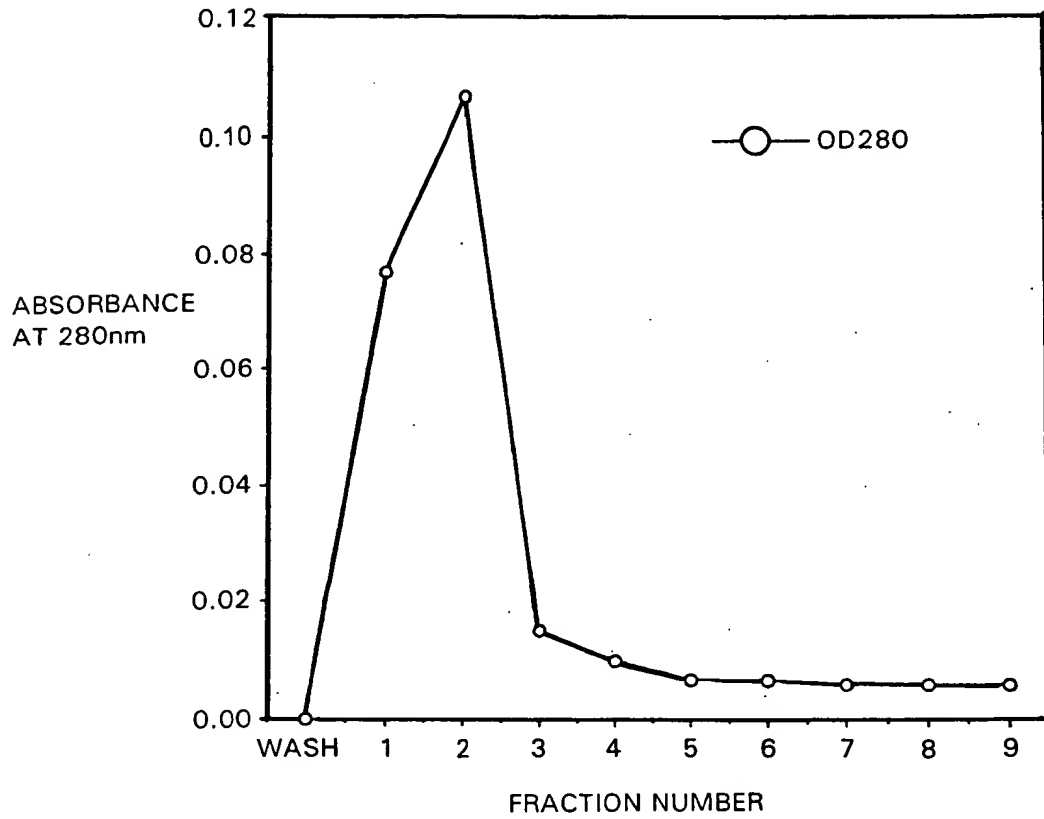


FIG. 18

APPROVED	O.G. FIG.	
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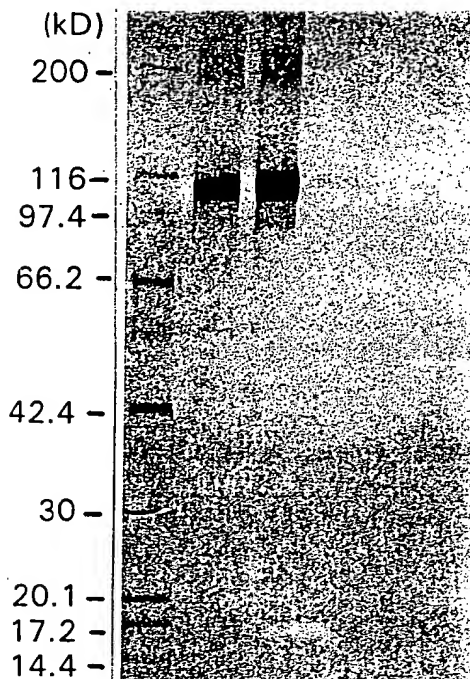


FIG. 19

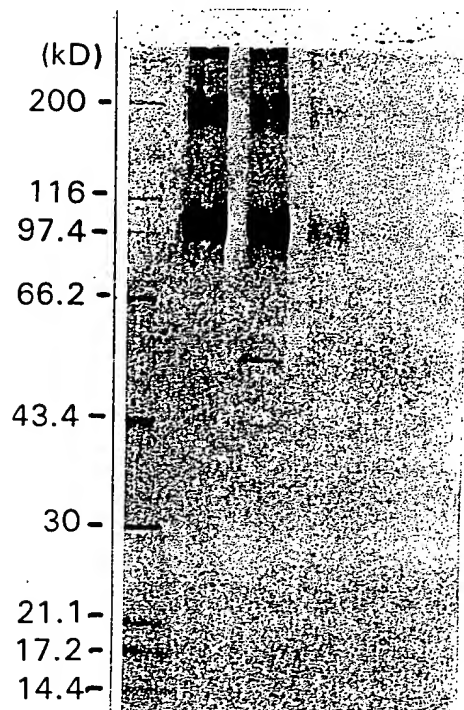


FIG. 21

APPROVED	O.G. FIG.	
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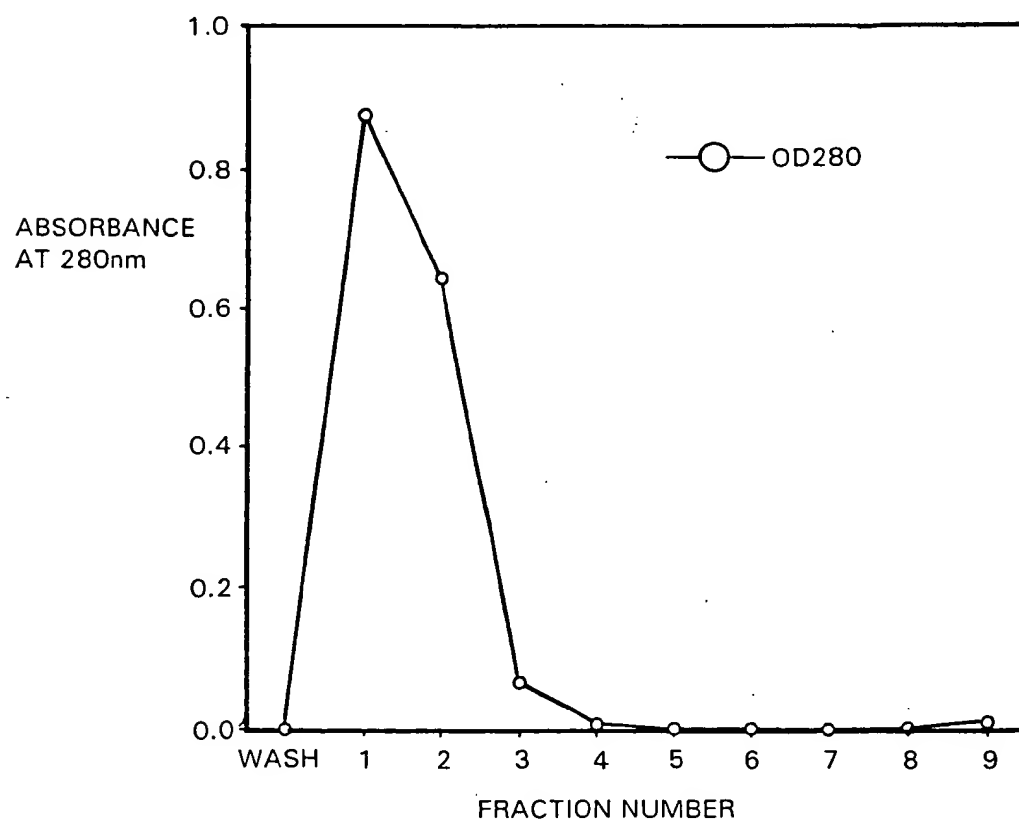


FIG. 20

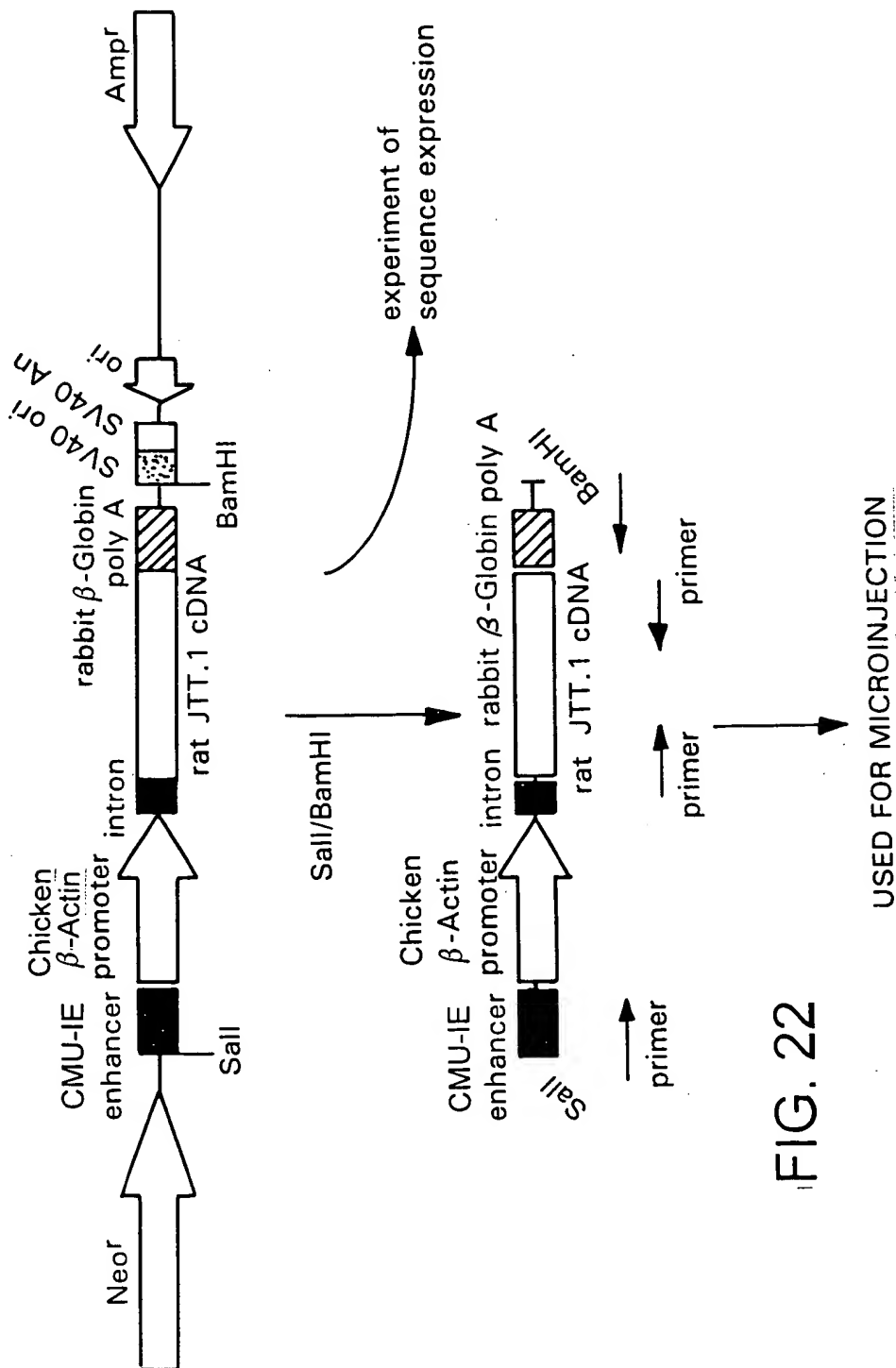


FIG. 22